

United States Patent and Trademark Office

UNITED STATES DEPARTMENT OF COMMEI United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

EXAMINER

ATTORNEY DOCKET NO. CONFIRMATION NO. APPLICATION NO. FILING DATE FIRST NAMED INVENTOR 37886/GM/cb 10/622,636 07/21/2003 Giovanni Manfre'

4567

07/27/2004

PAIK, SANG YEOP

Dr. MODIANO & ASSOCIATI S.p.A. Via Meravigli, 16 20123 Milano, **ITALY**

ART UNIT

PAPER NUMBER

3742

DATE MAILED: 07/27/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

	Application No.	Applicant(s)
Office Action Summary	10/622,636	MANFRE' ET AL.
	Examiner	Art Unit
	Sang Y Paik	3742
The MAILING DATE of this communication a	ppears on the cover sheet with the	correspondence address
Period for Reply	N V IO OET TO EVOIDE A MONTI	LICE EDOM
A SHORTENED STATUTORY PERIOD FOR REF THE MAILING DATE OF THIS COMMUNICATION - Extensions of time may be available under the provisions of 37 CFR after SIX (6) MONTHS from the mailing date of this communication. - If the period for reply specified above is less than thirty (30) days, a re - If NO period for reply is specified above, the maximum statutory perion. - Failure to reply within the set or extended period for reply will, by state Any reply received by the Office later than three months after the mail earned patent term adjustment. See 37 CFR 1.704(b).	J. 1.136(a). In no event, however, may a reply be eply within the statutory minimum of thirty (30) do will apply and will expire SIX (6) MONTHS froute. cause the application to become ABANDON	timely filed lays will be considered timely. om the mailing date of this communication. NED (35 U.S.C. § 133).
Status		
1) Responsive to communication(s) filed on		
•	is action is non-final.	
3) Since this application is in condition for allow	vance except for formal matters, p	prosecution as to the merits is
closed in accordance with the practice under	r Ex parte Quayle, 1935 C.D. 11,	453 O.G. 213.
Disposition of Claims		
4) ☐ Claim(s) 1-25 is/are pending in the application 4a) Of the above claim(s) is/are withden 5) ☐ Claim(s) is/are allowed. 6) ☐ Claim(s) 1-25 is/are rejected. 7) ☐ Claim(s) is/are objected to. 8) ☐ Claim(s) are subject to restriction and	rawn from consideration.	
Application Papers		
9)☐ The specification is objected to by the Exami	ner.	
10)⊠ The drawing(s) filed on 21 July 2003 is/are:	a) $igtiz$ accepted or b) $igsqcup$ objected to	by the Examiner.
Applicant may not request that any objection to the	ne drawing(s) be held in abeyance. S	ee 37 CFR 1.85(a).
Replacement drawing sheet(s) including the corre		
11)☐ The oath or declaration is objected to by the	Examiner. Note the attached Office	e Action or form PTO-152.
Priority under 35 U.S.C. § 119		
a) Acknowledgment is made of a claim for foreign a) All b) Some * c) None of: 1. Certified copies of the priority docume 2. Certified copies of the priority docume 3. Copies of the certified copies of the priority docume application from the International Bure * See the attached detailed Office action for a line	nts have been received. nts have been received in Applica iority documents have been recei eau (PCT Rule 17.2(a)).	ation No. <u>09/721,901</u> . ved in this National Stage
Attachment(s) 1) Notice of References Cited (PTO-892)	4) ☐ Interview Summa	ry (PTO-413)
2) Notice of Draftsperson's Patent Drawing Review (PTO-948)	Paper No(s)/Mail	Date
 Information Disclosure Statement(s) (PTO-1449 or PTO/SB/0 Paper No(s)/Mail Date <u>7/21//03</u>. 	8) 5)	l Patent Application (PTO-152)

Application/Control Number: 10/622,636

Art Unit: 3742

DETAILED ACTION

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

- (a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.
- 2. Claims 1-3 and 5-25 are rejected under 35 U.S.C. 102(b) as being anticipated by Sugiyama et al (EP 0 677 434).

Sugiyama et al shows a heated mirror comprising a glass body having a flat plate with varying shapes including spherical, a reflective film made of electrically conductive material such as titanium having the thickness of 0.05-0.15 um (50-150 nm), or about .03 um (30 nm) thickness of Titanium is used in combination of other layer to form the reflective layer as shown in Embodiment 20, a pair of conductive bus-bars made of silver paste, and the reflective coefficient of 40 % or higher.

With respect to claims 12 and 20, the claimed ratio between the reflective film and busbars is inherently met by Sugiyama et al which shows the same type materials used for such reflective film and busbars. Likewise, claims 17 and 25, the claimed resistivity coefficient is also inherently met by Sugiyama et al showing the same type materials used as well as having the same reflective film thickness range.

With respect to the recited process of vacuum arc deposition as well as other processes by which the reflective film and bus-bars are made, it is noted to the applicant that the product-by-

Application/Control Number: 10/622,636

Art Unit: 3742

process claims are limited by product itself, and the patentability does not depend on the method by which the product is made.

Claim Rejections - 35 USC § 103

- 3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
 - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 4. Claim 4 is rejected under 35 U.S.C. 103(a) as being unpatentable over Merz et al (US 4,087,778).

Sugiyama et al shows the heated mirror claimed providing the conductive bars interposed between the conductive film and the glass body.

Merz et al shows a resistor element whose conductive bus bars (14) are interposed between the glass ceramic body (12) and the conductive film (20). In view of Merz et al, it would have been obvious to one of ordinary skill in the art to adapt Sugiyama et al with the bus bars interposed between the glass body and the conductive film as an alternative arrangement to protect the busbars as well as to provide a stronger bonding between the bus bars and the reflective heating element.

5. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Sang Y Paik whose telephone number is 703-308-1147. The examiner can normally be reached on M-F (9:00-4:00) First Friday Off.

Page 4

Application/Control Number: 10/622,636

Art Unit: 3742

The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Sang Y Paik
Primary Examiner
Art Unit 3742

syp